	Application No.	Applicant(s)
Notice of Allowability	10/052,502	SHIMURA, HIROSHI
	Examiner	Art Unit	
	Brian Q. Le	2624	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to <u>03/20/2006</u>.

2. ☐ The allowed claim(s) is/are <u>3, 5-8, 10, 13, 15-18 and 20 (renumbered as 1-12)</u>.

3. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a) ☐ All   b) ☐ Some*   c) ☐ None of the:

      1. ☐ Certified copies of the priority documents have been received.

      2. ☐ Certified copies of the priority documents have been received in Application No. _____ .

      3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

    * Certified copies not received: _____ .

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application. **THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.

5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.

    (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached

      1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____ .

    (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of

      Paper No./Mail Date _____ .

    Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).

6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☐ Notice of References Cited (PTO-892)

2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3. ☒ Information Disclosure Statements (PTO-1449 or PTO/SB/08), Paper No./Mail Date <u>1/23/02; 4/26/06</u>

4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material

5. ☐ Notice of Informal Patent Application (PTO-152)

6. ☐ Interview Summary (PTO-413), Paper No./Mail Date _____ .

7. ☒ Examiner's Amendment/Comment

8. ☒ Examiner's Statement of Reasons for Allowance

9. ☐ Other _____ .

JINGGE WU
PRIMARY EXAMINER

Continued Examination Under 37 CFR 1.114

1.   A request for continued examination under 37 CFR 1.114, including the fee set forth in

37 CFR 1.17(e), was filed in this application after final rejection. Since this application is

eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e)

has been timely paid, the finality of the previous Office action has been withdrawn pursuant to

37 CFR 1.114. Applicant's submission filed on 03/20/2006 has been entered.

EXAMINER'S AMENDMENT

2.   An examiner's amendment to the record appears below. Should the changes and/or

additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR

1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the

payment of the issue fee.

    Authorization for this examiner's amendment was given in a telephone interview with

Megan s. Woodworth (Reg. No. 53,655) on 05/25/2006.

    The application has been amended as follows:

    . Claims 4 and 14 are canceled.

REASONS FOR ALLOWANCE

3.   The following is an examiner's statement of reasons for allowance:

Regarding independent claim 3, the prior art of records do not show the limitation of an image recognition system comprising "said examining part comprises a measurement part which measures the number of pixels each having a gray-scale level higher than a predetermined threshold on a foreground part, and measures the same on a background part of each image part, and a first scoring part which gives a score as to relationship between the thus-measured numbers of pixels, and wherein said measurement part does not measure the number of pixels on the background part near the boundary with the foreground part when the measured number of pixels on the foreground part is larger than a predetermined value" and in combination with other limitations of the claim.

For independent claims 5 and 15, the prior art of records do not show the limitation of an image recognition system comprising "a determining part which determines as to whether or not the input image parts coincide with the predetermined figure by using the first respective scores and the second score synthetically, wherein said examining part obtains continuity of a foreground part from the number of pixels each having a gray-scale level higher than predetermined threshold in respective areas obtained from dividing the foreground part" and in combination with other limitations of the claims.

Referring to independent claims 6 and 16, the prior art of records do not show the limitation of an image recognition system comprising "a determining part which determines as to whether or not the input image parts coincide with the predetermined figure by using the first

respective scores and the second score synthetically, wherein said examining part examines

angular periodicity on each image part" and in combination with other limitations of the claims.

As to independent claims 7 and 17, the prior art of records do not show the limitation of

an image recognition system comprising "a determining part which determines as to whether or

not the input image parts coincide with the predetermined figure by using the first respective

scores and the second score synthetically, wherein said examining part gives a plurality of

primary scores on each image part with respect to various characteristic factors, and then, give a

final score thereon by combining the plurality of primary scores according to a predetermined

manner" and in combination with other limitations of the claims.

Referring to independent claims 8 and 18, the prior art of records do not show the

limitation of an image recognition system comprising "a determining part which determines as to

whether or not the input image parts coincide with the predetermined figure by using the first

respective scores and the second score synthetically, further comprising a selecting part which

selects one of plurality of image parts to be sent to the determining part when the plurality of

image parts are present less than predetermined distance from each other" and in combination

with other limitations of the claims.

Regarding independent claims 10 and 20, the prior art of records do not show the

limitation of an image recognition system comprising "a determining part which determines as to

whether or not the input image parts coincide with the predetermined figure by using the first

respective scores and the second score synthetically, wherein said determining part sums the total

score on the respective input image parts and the score as to how much the arrangement of the

respective image parts resembles that of the respective elements of the predetermined figure" and in combination with other limitations of the claims.

For independent claim 13, the prior art of records do not show the limitation of an image recognition system comprising "determining as to whether or not the input image parts coincide the predetermined figure by using the first and second scores synthetically, wherein said step a) comprise the steps of a1) measuring the number of pixels each having a gray-scale level higher than a predetermined threshold on a foreground part, and measuring the same on a background part of each image part, and a2) giving a score as to relationship between thus-measured numbers of pixels, and said step a1) does not measure the number of pixels on the background part near the boundary with the foreground part when the measured number of pixels on the foreground part is larger than a predetermined value" and in combination with other limitations of the claim.

4.   Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."
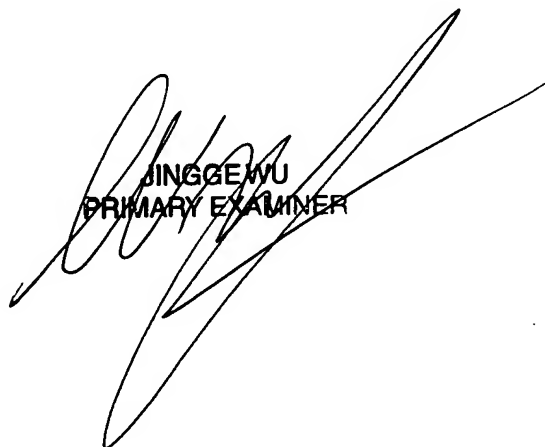
CONTACT INFORMATION

5.   Any inquiry concerning this communication or earlier communications from the
examiner should be directed to Brian Q. Le whose telephone number is 571-272-7424. The
examiner can normally be reached on 8:30 A.M - 5:30 P.M.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's
supervisor, Jingge Wu can be reached on 571-272-7429. The fax phone number for the
organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent
Application Information Retrieval (PAIR) system. Status information for published applications
may be obtained from either Private PAIR or Public PAIR. Status information for unpublished
applications is available through Private PAIR only. For more information about the PAIR
system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR
system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

BL
May 27, 2006

JINGGE WU
PRIMARY EXAMINER